AMSAT News Service Weekly Bulletins
Issue: ANS-122
Date: 2010-05-02
Sources: amsat-ans-2010-ans-122-weekly.txt

AMSAT NEWS SERVICE
ANS-122

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

****
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*   Booth and activities. For the latest information go to: *
*   http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php   *
*   *
*   Please be advised that tickets for the AMSAT-TAPR banquet at   *
*   Dayton will not be sold at the booth.   *
All tickets must be purchased at the AMSAT store by Monday, 10 May
*   http://www.amsat-na.com/store/item.php?id=100158   *
****

In this edition:
* Successful ARISS Contact With European School in European Parliament
* H-IIA Rocket to Launch Four Cubesats
* Nanosatellite Launch Service 6 on PSLV-C15
* Satellite Shorts From All Over
* ARISS Status - 26 April 2010

SB SAT @ AMSAT $ANS-122.01
Successful ARISS Contact With European School in European Parliament

AMSAT News Service Bulletin 122.01
  From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.01

On Tuesday, April 27 students of the European School II, Brussels enjoyed a successful Amateur Radio on the International Space Station (ARISS) contact with Astronaut Tim Creamer, KC5WKI operating the Amateur Radio station NA1SS aboard the International Space Station. The ISS was over South America during the contact with Adrian Sinclair's ARISS Telebridge station LU1CGB in Buenos Aires providing a solid earth station link. Twelve students selected from the school completed the contact.

ARISS Chairman Gaston Bertels, ON4WF hosted the event at the European Parliament in Brussels as a feature of a cultural exhibition set up in collaboration with the International Amateur Radio Union, the European Space Agency and sponsored by MEP Birgit, Sippel, Germany. The IARU Exhibition's name is "European Amateur Radio Benefiting Society" with the theme of Emergency, Education and Space.

Because of the high profile of the location of the event at the European

Parliament Building in Brussels there was considerable opportunity to raise awareness through media coverage, especially with Brussels European School's 'model' schooling for Europe.

This chance to participate in an ARISS project was actively embraced by the Science faculty and it is here where the opportunities for curricular integration are gaining momentum. In the 1st Year Secondary (typically aged 11) students study forces, gravity, weight and basic ideas about 'fields'. In the 2nd Year, studies of the Solar System, and well beyond, link directly to the Shuttle missions and the International Space Station. In Year 7 (the final Baccalaureate year, when most students are aged 18) the Physics section on 'Gravitational Fields' is mainly about the mechanics of planetary and satellite motion. Topics (and questions) are often presented within the context of NASA and ESA missions.

Reporting from Brussels, Gaston wrote, "In the European School, located in a residential area of Brussels, a similar setup was provided and many students listened in to the event live. Later in the same afternoon, ISS crew members came to visit the exhibition. ISS Commander Frank De Winne, ON1DWN, Robert Thirsk, VA3CSA and Roman Romanenko, each one representing a different Space Agency participated in a live question and answer session with a group of students from the European School and from another school."

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crew members onboard the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crew members on ISS can energize youngsters' interest in science, technology and learning.

Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

[ANS thanks ARISS Chairman Gaston Bertels, ON4WF; David Jordan, AA4KN; and ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-122.02
H-IIA Rocket to Launch Four Cubesats

AMSAT News Service Bulletin 122.02
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.02

Four CubeSats in Japan are planning to launch on 17 May 2010 together with PLANET-C which belongs to JAXA by H-IIA rocket.

Launch date, 17 May 2010
Launch time, 21:44:14UTC
Launch site, Tanegashima Space Center in Japan

http://www.jaxa.jp/press/2010/03/20100303_h2af17_e.html
http://www.jaxa.jp/index_e.html

Three of the CubeSats, Negai*", WASEDA-SAT2, KSAT, being launched by
the H-IIA rocket on May 17 will be dropped off into a low earth orbit
but UNITEC-1 will continue following the JAXA's Venus Climate Orbiter
PLANET-C / AKATSUKI on its journey to Venus.

UNITEC-1, NPO UNISEC (University Space Engineering Consortium)
   5.840GHz, travel into deep space towards Venus
   http://www.unisec.jp/unitec-1/en/top.html

Negai*", Soka University
   437.305MHz CW, Packet 1200bps FSK AX.25
   http://kuro.t.soka.ac.jp/main.html

WASEDA-SAT2, Waseda University
   437.485MHz CW(FM), PCM-FSK(FM) 9600bps
   http://www.miyashita.mmech.waseda.ac.jp/Waseda-Sat2/index.htm

KSAT, Kagoshima University
   Uplink: S-band(2GHz, 10kbps), Downlink: Ku-band(13.275GHz, 10kbps/1Mbps)
   http://www.sci.kagoshima-u.ac.jp/~nishio/download/Ukaren2008Nishio.pdf

[ANS thanks Mineo, JE9PEL, for the above information]

/EX

SB SAT @ AMSAT $ANS-122.03
Nanosatellite Launch Service 6 on PSLV-C15

AMSAT News Service Bulletin 122.03
  From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.03

The Space Flight Laboratory (SFL) at the University of Toronto Institute
for Aerospace Studies (UTIAS) would like to announce the delivery of
Nanosatellite Launch Service 6 (NLS-6) cluster payload to Satish Dhawan
Space Centre in Sriharikota (SDSC-SHAR), Andhra Pradesh, India, for
launch on board PSLV-C15. PSLV-C15 will be launching from the First
Launch Pad at SDSC-SHAR into 637 km sun-synchronous orbit with 10:30
Local-Time of Descending Node. NLS-6 shares this launch with Cartosat-2B
primary, Alsat-2A co-primary, and STUDSAT auxiliary payload.

NLS-6 is the 6th launch by SFL. The NLS-6 cluster comprises of two
nanosatellite: AISSat-1 and TIsat-1.

NLS-6 launch updates are being posted to
         http://www.utias-sfl.net/NLS-6/

About AISSat-1

AISSat-1 is built by SFL for the Norwegian Defence Research
Establishment (FFI). It is intended to demonstrate a new maritime AIS
receiver that has been developed by FFI. The AIS receiver will be used
to monitor ship traffic in Norwegian waters. The design of AISSat-1 is
based on SFL Generic Nanosatellite Bus (GNB).

The spacecraft has a main structure measuring 20 cm by 20 cm by 20 cm
and it is stabilized in three-axes using reaction wheels. It has a fixed
46 cm long VHF payload monopole antenna for the AIS receiver and four

UHF uplink monopole antennas for the command receiver. The downlink in the S-Band. AISSat-1 has an overall dimension of 80 cm by 45 cm by 37 cm and an overall mass of 6.5 kg. AISSat-1 will be secured to the launch vehicle using the XPOD GNB separation system.

AISSat-1 is not an amateur satellite and, as such, has coordinated appropriate frequencies. Its ground segment is located at Svalbard and its control centre is at FFI, near Oslo, Norway.

More information on the spacecraft can be found at
http://www.utias-sfl.net/nanosatellites/AISSat-1/
and
http://www.spacecentre.no/?module=Articles;action=Article.publicShow;ID=5138
9

About TIsat-1

TIsat-1 is a 1 kg CubeSat of 10 cm by 10 cm by 10 cm and is built by students and staff at University of Applied Sciences of Southern Switzerland (SUPSI). The primary mission objective is to involve students in systems engineering, development and test with a very challenging project and to provide students and staff at SUPSI with space mission knowledge. TIsat-1 will monitor the durability of material probes exposed to space environment, will test a micro electromechanical device and will validate the redundant, fault tolerant hardware and firmware design of the bus.

Two monopole antennas (VHF and UHF) will be deployed after separation. Housekeeping and payload data will be communicated to the ground as orbital data profiles. TIsat-1 will be secured to the launch vehicle using the XPOD Single separation system.

TIsat-1 communicates over amateur radio frequencies, as coordinated through the IARU, and they have been working with radio amateurs in Switzerland during the spacecraft's development. They have a Morse Code and data beacons. More information can be found at
http://www.spacelab.dti.supsi.ch/tiSat1.html

Future Launches by SFL

SFL has signed its 7th launch contract with ANTRIX for NLS-7 in late 2010/early 2011. NLS-7 will launch the twin-satellite CanX-4 and CanX-5 formation flying mission.

SFL will be signing its 8th launch contract for NLS-8 momentarily, for the launch of two astronomy nanosatellites: BRITE-Austria (CanX-3A) and UniBRITE (CanX-3B). NLS-8 will also launch one partner spacecraft.

In addition, SFL is under discussion for NLS-9, NLS-10, and NLS-11 launches in 2011/2012 time frame, and would like to extend an invitation to spacecraft developers world-wide to join our launches.

For further information, please contact:
Freddy M. Pranajaya
Manager, Advanced Systems Group
UTIAS Space Flight Laboratory
4925 Dufferin Street, Toronto, Ontario, CANADA M3H 5T6
+1-416-667-7890 Voice
+1-416-667-7799 Fax
freddyp@utias-sfl.net
http://www.utias-sfl.net/

[ANS thanks Daniel, VA3KKZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-122.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 122.04
  From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.04

+ Hiroyuki, JG7PSJ will be QRV as JD1BMH from Chichijima, IOTA
   AS-031, from May 2 to 14. Activity is on 40 to 6 meters, and
   possibly 80 meters, using CW, SSB and digital modes. QSL to
   home call. In addition, Makoto, JI5RPT will be QRV as JD1BLY,
   also from Chichijima, from May 2 to 7. Activity will be on 40
   to 6 meters using CW, SSB, digital modes and Satellites. QSL
   to home call. (via ARRL ARLD017 DX news)

+ Congratulations to Loren, K7CWQ, who just received his VUCC
   award - using a FT-60R and Arrow Sat antenna as his station.
   Well done, sir!

+ Also congratulations to KD0EM, Harold in EL98 Florida. On April 22
   he worked W4AS for his first satellit contact via AO-27 FM.

+ Martha reminds us from AMSAT HQ that tickets for the AMSAT-TAPR
   banquet at Dayton will not be sold at the booth. All tickets must
   be purchased at the AMSAT store by Monday, 10 May:
   http://www.amsat-na.com/store/item.php?id=100158
   Dr. Robert McGwier, N4HY, will be the Banquet speaker

+ Gavin, M1BXF reports the Camb-hams, the social side of the Cambridge
   Repeater Group (ex Pye telecoms group) will be active on FM and SSB
   satellites as GS3PYE/P from grid IO67nt on the Island of Harris
   Scotland between May 1st and May 15th. More information can found
   on their DXpedition webpage:
   http://dx.camb-hams.com/dx-peditions/harris-dxpedition-10/

+ A video has been released that explains the design philosophy of the
   core power control unit of New Zealand's first Amateur Radio satel-
   lite KiwiSAT. In the video Hans Holtz ZL1HB and Andrew Cammell ZL1AVC
   explains the design and operation of the KiwiSAT central power con-
   trol system know as the Battery Control Regulator or BCR. Watch at:
   http://tinyurl.com/28ocp8h

+ The Radio Club Ushuaia LU8XW is planning an expedition to the City
   of Tolhuin, commemorating the 25th anniversary of the radio club.
   LU8XW will be active in SSB, CW, PSK, RTTY and Satellites, from
   01:00 UTC May 22 until 03:00 UTC May 24. QSLs via WD9EWK and LoTW
   (IOTA SA 008) - (W.A.P. - W.A.C.A Ref ARG-23) All contacts on this
   expedition are all contacts are valid for Radio Club Ushuaia
   Permanent Diploma. Please sen dany questions or comments to
   lu8xw@lu8xw.com.ar Please visit our web www.lu8xw.com.ar Thanks!
   Pablo LU6XV SOURCE: 73 de Augusto HB9TZA / I2JJR - SRT

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-122.05
ARISS Status - 26 April 2010

AMSAT News Service Bulletin 122.05
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.05

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Nippon Boy Scout Amateur Radio Club in Mitaka-shi, Japan on Tuesday, May 4 at 15:09 UTC. The Japan Boy Scouts have an amateur radio club,
JA1YSS and study amateur radio station operations. The boys look forward to speaking with JAXA astronaut Soichi Noguchi, a former Boy Scout.

The Smithsonian Institution National Air and Space Museum (NASM) in Washington,
D.C. has been scheduled for an Amateur Radio on the International Space Station
(ARISS) contact on Family Day, Saturday, May 8 at 17:01 UTC via VK4KHZ in Australia. The Education Division of NASM is recruiting the young people who will participate in the contact. Generally, Boy Scouts and other groups are involved with this activity. The Museum draws approximately 30,000 on this Saturday in May.

2. Caldwell-Dyson Speaks with Houston School via ARISS

On Monday, April 19, Expedition 23 astronaut Tracy Caldwell-Dyson, KF5DBF participated in an Amateur Radio on the International Space Station (ARISS) contact with students from Jessup Elementary School in Houston, Texas. The connection was made through telebridge station WH6PN in Hawaii. Prior to the contact, ARISS was incorporated into science, math, and language arts classes
and children prepared 20 questions for the astronaut. Caldwell-Dyson answered
them all as a crowd, filling the school's gymnasium, listened in. Several newspapers also attended and covered the event.

3. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, April
20. Topics of discussion included an update on the radio equipment for the Columbus Module and an ARISSat-1 status. Minutes have been posted. See: https://www.rac.ca/ariss/arisstel2010-04-20.htm

4. Astronaut Training Status

On Monday, April 19, astronauts Kevin Ford and Shane Kimbrough received an overview of the Amateur Radio on the International Space Station (ARISS) program, followed by a Basic Ops session with Kimbrough. Both astronauts are scheduled to fly on future ISS expeditions.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS